Do Inflation Expectations Drive Cryptocurrency Investments?

Will Cong ☑��

Cornell University, Ithaca, NY, USA

Pulak Ghosh ☑��

Indian Institute of Management, Bangalore, India

Jiasun Li¹ ⊠ 😭 📵

George Mason University, Fairfax, VA, USA

Qihong Ruan 🖂 🧥 📵

Cornell University, Ithaca, NY, USA

SUNY Buffalo, Buffalo, NY, USA

- Abstract

This extended abstract summarizes the essence of [1], which uses proprietary data from a predominant cryptocurrency exchange in India and the country's Household Inflation Expectations Survey to document a significantly positive association between inflation expectations and individual cryptocurrency purchases. The authors find that the effect is concentrated in Bitcoin (BTC) and Tether (USDT) trading, and is robust after controlling for speculative demand captured by surveys of investors' expected cryptocurrency returns. They also find that higher inflation expectations are associated with more new cryptocurrency investors. These results have causal interpretations as confirmed by instrumental variables. The findings of [1] provide direct evidence that households already adopt cryptocurrencies for inflation hedging, which in turn rationalizes their high adoption in developing countries without a globally dominant currency.

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1 Motivation

Understanding why people buy and hold cryptocurrencies is a central topic in both blockchain and finance research, as many tokens lack fiat backing or cash flow yet still command substantial value. While explanations abound – from speculative trading to utility in digital ecosystems – inflation hedging is among the most frequently proposed. This is especially true for cryptocurrencies with capped supplies or pegged values, which in principle protect purchasing power against local currency depreciation. The authors of [1] provide direct, systematic, and real-world evidence for this argument in a large emerging market context.

¹ Please send correspondence to Li; Authors are listed alphabetically.

2 Setting and Data

India offers an ideal testing ground: historically high inflation, limited access to foreign currencies due to strict capital control, and high rates of cryptocurrency adoption. The empirical analysis links two sources:

- **Exchange transactions:** pseudonymized trades from India's largest cryptocurrency exchange, which contain transaction and investor demographics details.
- Inflation expectations: Repeated cross-sections from the Inflation Expectations Survey of Households held by the Reserve Bank of India (India's central bank), with projections for general price changes three and twelve months ahead.

The study matches exchange activity to local survey measures via postal code and survey period.

3 Empirical Approach

The authors of [1] assess whether high local inflation expectations precede more net cryptocurrency purchases, as well as more new investors entering the exchange. To establish a causal relationship, they also use contemporaneous perceived inflation as an instrument variable.

4 Key Findings

Several consistent patterns emerge:

- 1. **Positive association:** Higher expected inflation is followed by larger net purchases of cryptocurrencies.
- **2. Asset concentration:** The effect is concentrated in Bitcoin and Tether; other tokens show little response.
- **3. New participation:** Local rises in expected inflation is followed by more entry of first-time investors onto the exchange.
- 4. Robustness: Results hold when controlling for speculative motives (measured by surveyed cryptocurrency return expectations), and disappear for trades not tied to the local currency (Indian Rupee).

5 Contributions and Implications

This work delivers rare micro-level evidence connecting inflation expectations to actual cryptocurrency investment. The findings:

- Demonstrate that some cryptocurrencies are already perceived and used as inflation hedges.
- Highlight differences across asset types, geographies, and investor demographics.
- Provide direct evidence to suggest that macroeconomic factors may shape cryptocurrency adoption.

For policymakers, the results underline the potential for cryptocurrencies to absorb household demand for value preservation in inflation-prone economies. For researchers, they open avenues for studying macro-financial drivers of digital asset markets beyond speculative trading.

6 Conclusion

The authors of [1] show that inflation expectations influence both the scale and incidence of cryptocurrency investment in India, particularly in assets aligned with hedging narratives. This result underscores the role of macroeconomic perceptions in driving adoption and hints at potentially similar patterns in other emerging markets facing persistent inflationary pressures.

References -

1 Lin William Cong, Pulak Ghosh, Jiasun Li, Qihong Ruan, and Artem Streltsov. Inflation expectation and cryptocurrency investment. Technical report, National Bureau of Economic Research, 2024. URL: https://www.nber.org/papers/w32945.